11-24-14: Summary of Technical Meeting on Selenium and Mercury

Issue: EPA concerned that DEIS underestimates the potential impacts of selenium contributions from restoration and operations.
Decision: ICF will redo the selenium water column modeling (not re-run DSM2) to account for some new changes that were brought up from Tetra Tech modeling from the Western Petroleum Assoc. comments. ICF is also going to look at the potential for increased residence time qualitatively (as best they can) and add this information to the EIS. ICF is going to perform an updated literature review for green sturgeon and other sensitive species (exploring life history, critical thresholds, etc.), and include this information in the DEIS. EPA will be permitted to use this information to run independent models if desired (Janet's group). The DEIS will provide context for the sources of the Se, and explain that measures may need to be taken beyond the study area for the BDCP (e.g. land retirement on the west side of the SJV) to reduce the Se loads from Ag drainage entering the Delta, and to help protect the most sensitive species. However, DWR is not committing to taking any responsibility for Se source reduction. ICF is going to revisit and be more transparent on the uncertainty of the impacts from Se. Chapters 8 WQ and 11 Fish will be cross-referenced, and a section on selenium will be added to the fish chapter. ICF will add text into the DEIS that clarifies potential cumulative effects of Se discharge from Ag entering the Carquinez Strait and adding to the burden of Se discharges from oil refineries.
Next steps: After ICF provides updated information and context for the selenium problem in the Delta, this issue may need to be brought up at a policy meeting. Impacts from operating the BDCP may increase the exposure of certain species to selenium, even if the BDCP is in itself not the source of the selenium. Responsibility for the problem is unknown, but many of the affected species are on the decline and cannot wait.

Issue: EPA concerned that DEIS underestimates the potential impacts of methylmercury contributions from restoration and operations.
Decision: ICF is going to distinguish within CM 12 (methylmercury management measure) that the landscapes and potential management measures will be different between CM2 (Yolo Bypass - clay soils - floodplain) and CM4 (interior Delta - subsided peat islands - tidal restoration). ICF is going to add into the DEIS "design considerations" ("design criteria") for restoring wetlands to achieve multiple goals such as reversal of subsidence, sequestration of carbon and mercury, levee stabilization, and maintaining channel geometry and tidal energy so that X2 (low salinity zone) can be managed to increase the abundance and survival of resident fishes. Restoration principles from the Suisun Marsh Plan that describes scenarios for reversing subsidence on sunken tracts so they can be raised and eventually restored to tidal action will be added. ICF is also adding information on dredged material and its relation to use for restoration. ICF is going to add current information from the DWR restoration scientists about current Delta projects involving mercury. ICF is also updating sections on historical ecology design criteria and Yolo Bypass risks.
Next steps: Same as above for selenium. Mercury is ubiquitous throughout the Delta and there will exist tradeoffs between massive restoration and potential public health concerns. This issue may need to be brought up at a future policy meeting. EPA would like to review updated floodplain design criteria before publication of the Supplemental.

Issue: How will programmatic benefits to resident and migratory fishes from CM2 and CM4 be estimated and compared to estimated negative effects of CM1, CM2, and CM4?
Decision: Tabled for another time. ICF working on updating the net benefits table (for species) and EPA is also interested in having a broader discussion of tradeoffs between programmatic action's benefits impacting project-level impact determinations.

Next steps: Will either be a topic for another technical meeting or raised to the policy meeting.

Issue: EPA concerned that the upstream temperature analyses do not use available daily models. Consider applying EPA Guidance Criteria for Water Temperature.
Decision: The temperature analyses were not folded into the EIS and were only included in the HCP. They will be folded into the EIS now. The temperature analyses were developed with NMFS and there is a reason for using the monthly model and not the daily one (could be based on which river they were talking about) but NMFS wasn't sure what the reason was. ICF is going to check HCP to make sure that it is in line with EPA's Guidance Criteria.
Next steps: EPA will meet with NMFS offline to discuss daily vs monthly temp. models.

Issue: EPA concerned that the 20% M&I reduction mandates and differences in restoration footprints were not accounted for in modeling assumptions for water supply and demand?
Decision: ICF explained that the 20% reductions by 2020 were included indirectly in the modeling assumptions, because urban water management plans are assumed to achieve compliance with 20 by 2020 goal so they are in effect included. Jennifer said she's asked the consulting firm doing the modeling (AMA) to publish all the different restoration scenarios and footprints that were conducted for BDCP because it is impressive. ICF suggests reviewing BDCP Appendix 5A, Attachment D for some of the different restoration footprint scenarios. ICF suggests reading about the restoration scenarios for Suisun Marsh (7,000 acres)- was in the Suisun Marsh ROD from 2013.
Next steps: EPA will review Appendix 5A, Attachment D and will follow up with any questions.